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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,289	08/31/2006	Harald Hager	7601/88288	9193
66/991 7590 09/09/2009 LAW OFFICE OF MICHAEL A. SANZO, LLC 15400 CALHOUN DR. SUITE 125 ROCKVILLE, MD 20855				
EXAMINER GILLESPIE, BENJAMIN				
ART UNIT		PAPER NUMBER		
1796				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,289

Applicant(s)

HAGER ET AL.

Examiner

BENJAMIN J. GILLESPIE

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/2/2009 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 61-80** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. **Regarding claims 61-80:** The language "high-transparency" and "high shear" render claims 61 and 76 indefinite because "high" is a relative term.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

Obviousness Rejection I

5. **Claims 76-79** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joachimi et al (PG Pub 2003/0130381) in view of Kondo (U.S. Patent 5,830,568).
6. **Regarding claim 76:** Joachimi et al a method for producing a laser weldable, transparent material that is produced by mixing (A) polymer and (B) IR-absorbing compounds in an extruder – which is taken to satisfy “high shear” (Abstract; paragraphs 28 and 118). Component (B) is present between 0.001 to 0.1 wt% and may comprise metal based compounds, however, there is no mention of the claimed metal-oxide compounds or 1 to 500 nanometer particles sizes.
7. Kondo also teaches transparent material that is produced by mixing (A) polymer and (B) metal oxide particles in an extruder (Abstract; column 7 lines 55-57). In particular, component (B) has a particle size between 1 and 200 nanometers and preferably consists of indium-tin oxide (ITO) or antimony-tin oxide (ATO) – which is IR-absorptive (Col 1 lines 20-21; col 4 lines 45-48, 50-52, 67; col 5 lines 1-2).
8. Therefore, it would have been obvious to include the ITO or ATO particles of Kondo in Joachimi et al since they are disclosed by Kondo as being useful in producing transparent material and more importantly, said ITO and ATO are IR-adsorptive – a property required by Joachimi et al.

9. **Regarding claim 77-78:** Paragraphs 11-13 render obvious a component (B) consisting of indium-tin oxide or antimony-tin oxide.

10. **Regarding claim 79:** While Kondo teach indium-tin oxide, patentee fails to explicitly mention blue indium-tin oxide. Given that there is a small, mutually-exclusive, mutually-exhaustive list consisting of the types of indium-tin oxide—yellow (stoichiometric) and blue (non-stoichiometric)—for one with ordinary skill in the art, it would have been obvious to try using blue indium-tin oxide.

Obviousness Rejection II

11. **Claims 61-75 and 80** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joachimi et al (PG Pub 2003/0130381) in view of Kondo (U.S. Patent 5,830,568) and Wissman (PG Pub 2004/0030384).

12. **Regarding claim 61:** As discussed in paragraphs 11-13, Joachimi et al in view of Kondo render obvious a laser weldable material that is produced by mixing (A) polymers – such as polymethacrylates – and (B) light-absorbing particles, however, Joachimi et al fail to teach a suitable method of laser welding said transparent material to various substrates.

13. Wissman also teach laser weldable material based on (A) polymer and (B) light-absorbing particles, wherein (A) comprises polymethacrylate polymers (Abstract; paragraph 10). In particular, Wissman teaches that the joining face of weldable material is exposed to laser light, then placed next to the join face of the other weldable material (Paragraph 11).

14. Therefore, it would have been obvious to utilize the laser welding methodology of Wissman for the composition of Joachimi et al since Wissman teach it is suitable for polymethacrylate base resins - the same as Joachimi et al.

15. **Regarding claim 62:** The plastic material is a molded part (Abstract).
16. **Regarding claim 63:** As discussed in paragraphs 6-8 Joachimi et al in view of Kondo render obvious (B) having a particle preferably between 10 and 30 nanometers – wherein (B) comprises between 0.001 to 0.1 wt% of (A) + (B) (Joachimi et al; paragraph 28; Kondo; col 3 lines 16-18).
17. **Regarding claims 64-67, 72-75, and 80:** Component (A) comprises polymethacrylate, polyamide, and/or bisphenol-A-polycarbonate (Joachimi et al; paragraph 33).
18. **Regarding claims 68-69 and 71:** As discussed in paragraphs 6-8 Joachimi et al in view of Kondo render obvious (B) having a particle preferably between 10 and 30 nanometers – wherein (B) comprises between 0.001 to 0.1 wt% of (A) + (B) (Joachimi et al; paragraph 28; Kondo; col 3 lines 16-18).
19. **Regarding claim 70:** While Kondo teach indium-tin oxide, patentee fails to explicitly mention blue indium-tin oxide. Given that there is a small, mutually-exclusive, mutually-exhaustive list consisting of the types of indium-tin oxide—yellow (stoichiometric) and blue (non-stoichiometric)—for one with ordinary skill in the art, it would have been obvious to try using blue indium-tin oxide.

Double Patenting

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined

application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

21. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

22. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Obviousness-Type Double Patenting Rejection I

23. **Claims 61-80** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 38-57 of copending Application No. 10/544041.

24. The rejection has been previously set forth in paragraphs 5-7 of the final rejection mailed 4/2/2009 and is herein incorporated by reference.

25. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

26. **Claims 61-80** are directed to an invention not patentably distinct from claims 38-57 of commonly assigned 10/544041, similar as noted above.

27. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/544041, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(c), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

28. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Response to Arguments

29. Applicant's arguments with respect to claims 61-80 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the relied upon Wissman (2004/0030384) teaches a method of bonding laser-weldable material.

30. Applicant's arguments with respect to the obvious double patenting rejection in view of copending application 11/368,602 has been considered and is persuasive – the rejection has been withdrawn.

Conclusion

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm.

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James J. Seidleck/
Supervisory Patent Examiner, Art Unit 1796

/Benjamin J Gillespie/
Examiner, Art Unit 1796